

Item No.: SO4204-6Y

## UniTrain "FlexRay bus in automotive"

### Includes:

- Experiment board with the following features:
- Fully functional pre-configured FlexRay network with two nodes
- Interactive "steer-by-wire" function using FlexRay bus
- Plexiglass inserts to allow clear view of FlexRay nodes
- 16 terminals for easy access to individual bus lines
- Potentiometer for simulating turning of steering wheel
- Actuator motor for visualisation of steering angle
- CD-ROM with LabSoft browser and course software

### Training contents:

- Overview of bus systems available on the market
- Introduction to the fundamental technical aspects of communications relevant to the FlexRay bus (topologies, multiplexing methods)
- Detailed explanation of the structure of a FlexRay node
- Detailed observation of signal generation (symmetrical data transfer)
- Investigation of electromagnetic compatibility aspects
- Detailed description of data link layer
- Analysis of protocol down to bit level
- Description of time base used on a FlexRay bus
- Use of measuring instruments to investigate bus signals
- Measurements of the resistance to interference on the bus
- Fault simulation (4 faults which can be activated via relays)
- Course duration 10 hours approx. (including 1 hour of fault finding)